

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY DOCKET NO.

2002US304

SERIAL NO.

10/042,878

Mark O. NEISSER et al.

FILING

January 9, 2002

GROUP

1756

NOV 09 2005

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	TRADEMARK OFFICE INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
WY		4,491,628	1/1/1985	Ito et al.	430	176	
		4,521,274	6/4/1985	Reichmanis et al.	214	47	
		5,069,997	5/16/1989	Schwalm et al.	430	270.1	
		5,350,660	9/27/1994	Urano et al.	430	170	
		5,354,643	10/11/1994	Cabrera et al.	430	270.1	
		5,389,491	2/14/1995	Tani et al.	430	170	
		5,419,991	5/30/1995	Segawa	430	20	
		5,581,730	12/3/1996	Silla	711	144	
		5,585,219	12/17/1996	Kaimoto et al.	430	270.1	
WY		5,693,691	12/2/1997	Flaim et al.	523	436	
WY		5,716,756	2/10/1998	Pawlowski et al.	430	270.1	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
WY		JP 5-107770	4/30/1993	JAPAN			✓	
WY		JP 7-159997	6/23/1995	JAPAN			✓	
WY		JP 7-181687	7/21/1995	JAPAN			✓	
WY		JP 8-286384	11/1/1996	JAPAN			✓	
WY		JP 9-205057	8/5/1997	JAPAN			✓	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

Unida Yam

DATE CONSIDERED

1/20/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>				ATTY DOCKET NO. 2002US304	SERIAL NO. 10/042,878																																																																																					
				Mark O. NEISSE et al.																																																																																						
				FILING January 9, 2002	GROUP 1756																																																																																					
<p style="text-align: center;">NOV 09 2005 U.S. PATENT DOCUMENTS</p> <table border="1"> <thead> <tr> <th>EXAMINER INITIAL</th> <th>DOCUMENT NUMBER</th> <th>DATE</th> <th>NAME</th> <th>CLASS</th> <th>SUBCLASS</th> <th>FILING DATE IF APPROPRIATE</th> </tr> </thead> <tbody> <tr><td>ng</td><td>5,731,386</td><td>3/24/1998</td><td>Thackeray et al.</td><td>525</td><td>328.2</td><td></td></tr> <tr><td></td><td>5,763,135</td><td>6/9/1998</td><td>Ding et al.</td><td>430</td><td>191</td><td></td></tr> <tr><td></td><td>5,763,954</td><td>6/9/1998</td><td>Hyakutake</td><td>251</td><td>774</td><td></td></tr> <tr><td></td><td>5,795,701</td><td>8/18/1998</td><td>Conley et al.</td><td>430</td><td>325</td><td></td></tr> <tr><td></td><td>5,871,730</td><td>12/22/1998 2/11/1999</td><td>Thackeray et al. Brzezinski et al.</td><td>424</td><td>94.61</td><td></td></tr> <tr><td></td><td>5,851,738</td><td>12/22/1998</td><td>Thackeray et al.</td><td>430</td><td>327</td><td></td></tr> <tr><td></td><td>5,880,169</td><td>3/9/1999</td><td>Osawa et al.</td><td>522</td><td>25</td><td></td></tr> <tr><td></td><td>5,882,996</td><td>3/16/1999</td><td>Dai</td><td>438</td><td>597</td><td></td></tr> <tr><td></td><td>5,886,102</td><td>3/23/1999</td><td>Sinta et al.</td><td>525</td><td>154</td><td></td></tr> <tr><td>ly</td><td>5,928,837</td><td>7/27/1999</td><td>Sato et al.</td><td>430</td><td>270.1</td><td></td></tr> <tr><td>hwg</td><td>5,935,760</td><td>8/10/1999</td><td>Shao et al.</td><td>430</td><td>271.1</td><td></td></tr> </tbody> </table>							EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	ng	5,731,386	3/24/1998	Thackeray et al.	525	328.2			5,763,135	6/9/1998	Ding et al.	430	191			5,763,954	6/9/1998	Hyakutake	251	774			5,795,701	8/18/1998	Conley et al.	430	325			5,871,730	12/22/1998 2/11/1999	Thackeray et al. Brzezinski et al.	424	94.61			5,851,738	12/22/1998	Thackeray et al.	430	327			5,880,169	3/9/1999	Osawa et al.	522	25			5,882,996	3/16/1999	Dai	438	597			5,886,102	3/23/1999	Sinta et al.	525	154		ly	5,928,837	7/27/1999	Sato et al.	430	270.1		hwg	5,935,760	8/10/1999	Shao et al.	430	271.1	
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE																																																																																				
ng	5,731,386	3/24/1998	Thackeray et al.	525	328.2																																																																																					
	5,763,135	6/9/1998	Ding et al.	430	191																																																																																					
	5,763,954	6/9/1998	Hyakutake	251	774																																																																																					
	5,795,701	8/18/1998	Conley et al.	430	325																																																																																					
	5,871,730	12/22/1998 2/11/1999	Thackeray et al. Brzezinski et al.	424	94.61																																																																																					
	5,851,738	12/22/1998	Thackeray et al.	430	327																																																																																					
	5,880,169	3/9/1999	Osawa et al.	522	25																																																																																					
	5,882,996	3/16/1999	Dai	438	597																																																																																					
	5,886,102	3/23/1999	Sinta et al.	525	154																																																																																					
ly	5,928,837	7/27/1999	Sato et al.	430	270.1																																																																																					
hwg	5,935,760	8/10/1999	Shao et al.	430	271.1																																																																																					
FOREIGN PATENT DOCUMENTS																																																																																										
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION																																																																																				
						YES	NO																																																																																			
ng	JP 10-301268	11/13/1998	JAPAN																																																																																							
hwg	DE 39 30 086	3/21/1991	GERMANY																																																																																							
ng	DE 39 30 087	3/14/1991	GERMANY																																																																																							
ng	DE 41 12 967	10/22/1992	GERMANY																																																																																							
ng	EP 0 583 205	2/16/1994	EUROPE																																																																																							
OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>																																																																																										
EXAMINER	<i>Chidi Ijuru</i>			DATE CONSIDERED	1/20/05																																																																																					
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>																																																																																										

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

ATTY DOCKET NO.
2002US304

SERIAL NO.
10/042,878

Mark O. NEISSE et al.

FILING
January 9, 2002

GROUP
1756



NOV 09 2005

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
W	5,994,006	11/30/1999	Nishi	4130	22	
ny	6,110,641	8/29/2000	Trefonas, III et al.	4130	270.1	
	6,110,653	8/29/2000	Holmes et al.	4130	325	
	6,316,165	11/13/2001	Pavelchek et al.	4130	311	
	6,319,651	11/20/2001	Holmes et al.	4130	270.1	
	6,322,948	11/27/2001	Jung et al.	4130	270.1	
	6,329,117	12/11/2001	Padmanaban et al.	4130	270.1	
	2003/0104322	6/5/2003	Yamashita et al.	4130	331	
	2003/0129531	7/10/2003	Oberlander et al.	4130	271.1	
	2003/0215736	11/20/2003	Oberlander et al.	4130	270.1	
ny	2004/0013971	1/22/2004	Berger et al.	4130	270.1	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
ny	EP 0 794 458	9/10/1997	EUROPE				
ny	EP 0 905 565	3/31/1999	EUROPE				
ny	GB 2 320 718	7/1/1998	UNITED KINGDOM				
ny	GB 2 354 763	4/4/2001	UNITED KINGDOM				
ny	WO 97/33198	9/12/1997	WIPO				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

1/20/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>		Docket Number (Optional) 2004US304	Application Number 10/042,878
		Applicant(s) Mark O. NEISSEr et al.	
		Filing Date January 9, 2002	Group Art Unit 1756
*EXAMINER <i>MB</i>	OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>		
<i>NOV 9 2005</i>	Bather et al., "Titanium Nitride Oxide (TiNxOy) as a Barrier Between Chromium-Silicon-Oxygen (Cr-Si-(O)) and Aluminium Thin Films", Thin Solid Films Vol. 200, pages 93 - 116 (1991).		
<i>NY</i>	Cho et al., "Negative tone 193 nm resists", SPIE Vol. 3999, pages 62 - 73 (2000).		
<i>NY</i>	Choi et al., "Design and Synthesis of New Photoresist Materials for ArF Lithography", SPIE Vol. 3999, pages 54 - 61 (2000).		
<i>NY</i>	Choi et al., "Improved Lithographic Performance of 193nm-Photoresists Based on Cycloolefin / Maleic Anhydride Copolymer by Employing Mixed PAGs", SPIE Vol. 4345, pages 94 - 105 (2001).		
<i>M</i>	Czech et al., "Reduction of Linewidth Variation for the Gate Conductor Level by Lithography Based on a New Antireflective Layer", Microelectronic Engineering Vol. 21, pages 51 - 56 (1993).		
<i>MB</i>	Fu et al., "Negative-tone Cycloolefin Photoresist for 193 nm Lithography", SPIE Vol. 4345, pages 751 - 760 (2001).		
<i>MB</i>	Houlihan et al., "Chemically Amplified Resists: The Chemistry and Lithographic Characteristics of Nitrobenzyl Benzenesulfonate Derivatives", Journal of Photopolymer Science and Technology Vol. 3, No. 3, pages 259 - 273 (1990).		
<i>MB</i>	Ito, "Chemically Amplified Resists: Past, Present, and Future", SPIE Vol. 3678, pages 2 - 12 (March 1999).		
<i>MB</i>	Iwasa et al., "Novel negative photoresist based on polar alicyclic polymers for ArF excimer laser lithography", SPIE Vol. 3333, pages 417 - 424 ().		
<i>MB</i>	Naito et al., "Negative-type chemically amplified resists for ArF excimer laser lithography", SPIE Vol. 3333, pages 503 - 511 ().		
<i>MB</i>	Nölscher et al., "High contrast single layer resists and antireflection layers - an alternative to multilayer resist techniques", SPIE Vol. 1086, pages 242 - 250 (1989).		
<i>MB</i>	Richter et al., "Negative Tone Resist for Phase-Shifting Mask Technology: A Progress Report", SPIE Vo. 3999, pages 91 - 101 (2000).		
EXAMINER <i>Nicole S. Barnes</i>	DATE CONSIDERED <i>1/20/06</i>		
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>		Docket Number (Optional) 2004US304	Application Number 10/042,878
		Applicant(s) Mark O. NEISSER et al.	
		Filing Date January 9, 2002	Group Art Unit 1756
*EXAMINER <i>INTL F</i>	OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>		
<i>NOV 09 2005</i> <i>PTO-3</i> <i>WY</i>	Rushkin et al., "New Polymers for 193 nm Single Layer Resists Based on Substituted Cycloolefins/Maleic Anhydride Resins", SPIE Vol. 3678, pages 44 - 50 (March 1999).		
<i>WY</i>	Schlegel et al., "Studies on the Acid Formation and Deprotection Reaction by Sovel Sulfonates in a Chemical Positive Photoresist", Journal of Photopolymer Science and Technology Vol. 3, No. 3, pages 281 - 287 (1990).		
<i>WY</i>	Shida et al., "193-nm Single Layer Resists Based on Advanced Materials", SPIE Vol. 4345, pages 87 - 93 (2001).		
<i>WY</i>	Shirai et al., "Photochemistry of Imino Sulfonate Compounds and Their Application to Chemically Amplified Resists", Journal of Photopolymer Science and Technology Vol. 3, No. 3, pages 301 - 304 (1990).		
<i>WY</i>	Yamaoka et al., "Photochemical Dissociation of p-Nitrobenzyl Aromatic Sulfonate and Its Application to Chemical Amplification Resists", Journal of Photopolymer Science and Technology Vol. 3, No. 3, pages 275 - 280 (1990).		
<i>WY</i>	Yokoyama et al., "ArF Negative Resist System Using Androsterone Structure with 6-Hydroxy Acid for 100-nm Phase-Shifting Lithography", SPIE Vol. 4345, pages 58 - 66 (2001).		
<i>WY</i>	Yokoyama et al., "Effect of Comonomer Structure on Dissolution Characteristics: ArF Negative Resist System Using Androsterone Derivative with 7-Hydroxy Acid", Journal of Photopolymer Science and Technology Vol. 14, No. 3, pages 393 - 400 (2001).		
<i>WY</i>	Copy of Official Action (and English translation thereof) for JP Application No. Hei-10-186575.		
<i>WY</i>	English Language abstract of 2000-171604.		
EXAMINER <i>Christie Ban</i>	DATE CONSIDERED		<i>11/20/07</i>
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			